Established in 2008

"बेटी बचाओ, बेटी पढ़ाओ"

Jayoti Vidyapeeth Women's University, Jaipur

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STUDY OF FINANCIAL ADOPTION OF FINTECH SERVICES AMONG MANAGEMENT STUDENTS IN DELHI NCR

Submitted by

N. SURESH

Enrollment No :

JVR-l/22/10090

Under the Guidance of

DR. OM PRAKASH GUPTA

Department of Management & Commerce

Faculty of Law & Management

A Synopsis

Proposal Submitted in

fulfillment of the requirements for the award of the Degree of

DOCTOR OF PHILOSOPHY

(COMMERCE)

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Introduction

Financial Literacy

Financial literacy plays a crucial role among young people when it comes to making choices about their financial resources based on their personal characteristics and level of financial knowledge. Various studies (Joo and Garman: 1998, Cutler and Delvin: 2000) have indicated that financial literacy is a prevalent issue in many countries due to low levels of financial knowledge. Research conducted by (Beal & Delpachitra, 2003; and Abraham & Marcolin, 2006) has shown that the importance of financial literacy has increased as financial markets have become deregulated and access to credit has become easier.

Several studies (Guiso & Jappelli, 2008; Van Rooij et al., 2011) have concluded that individuals with higher levels of financial literacy tend to earn more income from their savings and are able to diversify their investments across different financial instruments. Another study by (Mahdzan & Tabiani, 2013) found that improving financial literacy and individual capabilities leads to better financial decision-making, which is particularly important for young people.

Lusardi and Mitchell (2014) define financial literacy as an individual's ability to understand and make informed decisions about economic aspects such as financial planning, debt management, wealth accumulation, and retirement planning. According to the OECD (2017, p. 13), financial literacy encompasses awareness, knowledge, skills, attitudes, and behaviour's that contribute to making sound financial decisions and achieving financial well-being.

According to (Swiecka, Yesilda, Ozen, & Simon, 2020), financial literacy consists of awareness, knowledge, skills, attitudes, and behaviour's that are essential for making financial decisions and aiming for personal financial well-being.

Financial Inclusion

Financial inclusion, a crucial policy concern, is being addressed by government entities, the private sector, and international organizations worldwide. Extensive research and recognition indicate that providing access to affordable financial products and services, which is known as financial inclusion, yields significant advantages for different segments of society and serves as a vital driver of economic development.

According to Dr. C. Rangarajan of the Reserve Bank of India in 2008, financial inclusion entails ensuring timely access to financial services and affordable credit for weaker sections and low-income groups. It aims to address the issue of financial exclusion.

The World Bank's Global Findex survey in 2014 revealed that approximately half of the global adult population lacks access to formal financial services like bank accounts, leading to financial exclusion. This irony exists despite the era of globalization. Therefore, providing

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affordable financial products to those without banking access or with limited access holds tremendous potential for improving their socio-economic status.

Financial inclusion also plays a significant role in advancing the United Nations' Sustainable Development Goals (SDGs) for 2030, as highlighted by Klapper, EL-Zogbhi, and Hess in 2016.

Furthermore, a study by Ozili (2018) emphasizes the benefits of the digital economy for consumers, service providers, and the government. It underscores how financial inclusion can be achieved through the digital economy, enabling marginalized individuals to participate in the financial system and ultimately reduce poverty.

Fintech

Fintech is a highly researched field in the era of globalization, involving the use of innovative and disruptive technology to provide financial services, as stated by (Rabbani et. al., 2020).

Fintech has emerged as a new tool to promote financial literacy, as highlighted by (Dorfleitner et al. 2017; Ratecka 2020). They describe Fintech as financial services enabled by innovative technological models.

A study conducted by (World Bank Group and IMF 2019) found that Fintech services and business models offer new solutions that aim to improve accessibility, efficiency, and security.

According to (Arner et al. 2020) argue that Fintech holds the potential for financial inclusion, resilience, transparency, and cost efficiency.

Additionally, (Nair et al., 2021) found that the Fintech revolution creates opportunities for financial inclusion.

According to Economic Survey 2023 India has highest Fintech adoption rate and the economic growth of the country led by digital infrastructure and how digital enablements are nurturing India's vision of a $1 Trillion digital economy by 2025.

Statement of Problem

The increase in the infiltration and adoption rate of Fintech in various fields has had a positive impact on the Indian economy. The study conducted by (Joo and Garman: 1998, Cuter and Delvin: 2000), found that financial literacy has been an issue in many countries including developed and developing countries. According to (Milan et al., 2019; Puschmann, 2017), the development of Fintech has emerged during 1950's when Automated Teller Machine (ATM), credit card processing, e-commerce and electronic stock trading was underway. In the era of globalization, financial institutions have transformed itself to adapt to financial technologies to meet the expectations of customers globally. Fintech is a highly

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researched field in the era of globalization, involving the use of innovative and disruptive technology to provide financial services, as said by (Rabbani et.al, 2020). There are numerous studies that have been conducted to assess the level of financial literacy across the globe. Considering a growing economy like India, its flagship program, Pradhan Mantri Jan Dhan Yojana (PMJDY), has been able to make comprehensive access to a bank account a near actuality, but the level of usage of accounts remains quite low. According to the National Statistical Commission the literacy rate in India is 73% despite that the financial literacy is very low at 24% compared to the other emerging economies of the world. The emergence of smart phones and ecommerce has lured the entry of Fintech into Indian economy to go cashless. Due to lack of awareness, citizens are either reluctant or oblivious in making use of the Fintech services available to them. Against this backdrop, the current research aims to enhance the understanding of financial adoption of Fintech services among the management students in Delhi NCR. The study also emphasizes how demographic factors are associated with the level of financial adoption .The study further analyses how financial adoption mediates the adoption of Fintech services among the students in Delhi NCR.

Objectives of the Study

- To assess the extent of financial adoption through Fintech services among the management students at Delhi NCR India.
- To investigate how demographic factors are associated with the level of financial adoption among management students in Delhi NCR.
- To analyze how financial adoption mediates the adoption of Fintech services among the management students in Delhi NCR.

Review of Literature

Financial Literacy:

Financial literacy refers to the ability to understand and make informed decisions about personal finances, such as spending, saving, borrowing, lending, and investing. Existing research in this field focuses on two main areas: (1) identifying the factors that contribute to financial literacy, including demographic, family, and peer characteristics; and (2) examining the relationship between financial literacy and economic decision-making. Numerous studies have been conducted to measure financial literacy using various objective and subjective measures, which encompass both basic and advanced financial knowledge and skills, ranging from day-to-day money management to long-term investment strategies.

Danes and Hira (1987) surveyed 323 college students from Iowa State University to assess their financial knowledge in various areas. Their findings indicated that males

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generally possessed more knowledge than females, married students had higher knowledge levels than unmarried students, and senior students outperformed junior students. Overall, the study revealed that college students had low financial knowledge. In general, literacy and education show a positive correlation, and some researchers have explored the relationship between educational attainment and financial literacy.

One of the early attempts to objectively measure financial literacy was carried out by Lusardi and Mitchell (2008). They developed a set of three questions that assessed key concepts, including numeracy (the ability to perform basic calculations related to compound interest rates), understanding of inflation, and knowledge about risk diversification. While these fundamental financial questions have been widely used in research, other scholars have also developed more complex concepts and measurements to objectively assess financial literacy.

Hilgert, Hogarth, and Beverly (2003) explored the connection between financial knowledge and financial behaviour's by focusing on four areas of financial management: cash-flow management, credit management, saving, and investment. They created a set of 28 true/false questions to gauge financial literacy. For instance, some of the questions asked whether creditors are required to disclose the annual percentage rate (APR) when granting a loan, or whether mutual funds guarantee a fixed rate of return. In addition to objective measures, many studies rely on individuals' self-assessed financial knowledge. This approach involves asking respondents to rate their personal financial knowledge on a scale of 1 to 5. Advocates of subjective measures argue that people's perceptions influence their financial behaviour's, and this approach is also cost-effective and straightforward to implement.

Previous studies have shown that older individuals tend to have lower financial literacy (Almenberg & Soderbergh, 2011). Bhushan and Medury (2013) conducted a study to measure financial literacy among salaried individuals and identify socio-economic and demographic factors influencing financial literacy levels. Gender has also been found to be a factor affecting financial literacy, with studies showing that males generally have higher literacy levels than females. For instance, Volpe, Joseph, and Haiyang (2002) found that male and older investors performed better in investment literacy.

In their 2013 study, Kumari S. and Viz P. explored the efforts made by regulatory agencies to encourage financial literacy. The researchers highlighted the importance of various programs available nationwide, which aim to educate people on personal finance matters. They provided suggestions to policymakers on recognizing the growing demand for financial awareness and creating suitable financial literacy initiatives.

Agarwalla et al. (2013) studied the influence of socio-demographic variables on financial knowledge, behaviour, and attitudes among working youth in urban India and reported similar gender differences as seen in other studies.

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Bashir et al. (2013) conducted a study in Pakistan to identify and analyze psychosocial factors that may influence financial literacy. They administered a questionnaire to 120 respondents and found that males exhibited higher levels of financial literacy. Similarly, Bhushan and Medury (2013) examined the level of financial literacy among salaried individuals in Himachal Pradesh, India, using a sample of 516 respondents. Their study revealed that the overall financial literacy level was relatively low (58.30%), and the financial literacy among females was even lower.

In their research conducted in 2014, Aggarwal and Gupta explored the impact of demographic factors, including gender and education level, on individuals' comprehension of financial topics. The study revealed that higher levels of education and discipline positively influenced individuals' capacity to effectively handle their finances.

However, research conducted by Lusardi and Mitchell (2014) revealed a discrepancy between individuals' self-assessed knowledge and their actual knowledge. They found that people tend to be overly confident in their financial knowledge and often overestimate their level of understanding.

In a study conducted by Anil Chandra Pathak in 2015, it was discovered and suggested that additional funding should be allocated to enhance financial literacy through various means such as workshops, seminars, programs, schemes, and projects. These initiatives should be implemented at different levels including schools, colleges, workplaces, and residential areas, with the aim of improving the understanding and effective utilization of financial products and services. By increasing financial knowledge through practical means, the overall financial system of the country can be strengthened. It is crucial to widely implement small-scale activities that educate individuals about different types of investments and their significance in local communities. Furthermore, it is imperative to regularly assess the outcomes of such programs.

The Organization for Economic Co-operation and Development (OECD) has been at the forefront of measuring financial literacy worldwide. They have developed their own definition of financial literacy as the combination of awareness, knowledge, skills, attitudes, and behaviour's necessary for making sound financial decisions and achieving individual financial well-being (OECD, 2015). To assess levels of financial literacy and inclusion, the OECD designed a questionnaire that captures financial behaviour, attitudes, and knowledge. The questionnaire consists of both objective and subjective questions to measure different dimensions of financial literacy. For example, objective questions evaluate knowledge, such as calculating interest on a savings account, while subjective questions assess attitudes, like confidence in retirement planning.

This study aims to analyze the differences between the two measures of financial literacy among Vietnamese young people, as these distinctions influence financial decision-

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making in different ways. Previous research by Rooij, Lusardi, and Alessie (2007) and Allgood and Walstad (2016) has shown that the objective and self-assessed measures of financial literacy are correlated. Therefore, both measures will be used in this study to examine how each predicts the adoption or intention to adopt Fintech services. The findings will contribute to the existing literature on financial literacy in two ways. Firstly, it will provide evidence of the financial literacy of young individuals and its impact on economic behaviour's in a technologically advanced financial environment. Secondly, it will enhance our understanding of a specific population who are assumed to have access to financial knowledge through formal education in a developing country. Gender differences in financial literacy were also observed in studies conducted by Firli (2017) and Almenberg and Soderbergh (2011).

Agarwalla et al. (2012) conducted a study in India, sampling approximately 3,000 respondents comprising students, young employees, and retired employees. They employed the OECD approach and concluded that the overall financial literacy score was poor by global standards. The study showed a positive correlation between financial knowledge and education, but education had no influence on financial attitudes.

In a subsequent study by Agarwalla et al. (2013), it was highlighted that although the respondents had high educational levels, they lacked sufficient financial literacy. This deficiency was attributed to the absence of relevant financial literacy inputs in the Indian education system.

Bhushan and Medury (2013) and Firli (2017) also found a positive association between financial literacy, education, and income. Financial Literacy and Credit Counselling Centres (FLCCs) established by the government operate in each district to address this issue.

Das and Mahapatra (2019) conducted a study on financial literacy in Assam and concluded that the level of financial literacy among Assamese people was satisfactory compared to the national average. They also identified a weak relationship between financial literacy and financial attitudes.

According to a study conducted in 2021 by Dharmesh K. Mishra, Sushant Malik, Asmita Chitnis, Dipen Paul, and Subham Sushobhan Dash, it was concluded that women residing in Sisilo village possess financial literacy and are actively involved in financial activities. The findings were based on the recorded responses indicating that these women make use of various banking services and have also purchased insurance products. However, the study also identified several obstacles that hinder financial literacy and inclusion in the village. These obstacles include factors such as gender disparities, limited access to education, ethnicity, personal financial circumstances, and lack of trust in financial institutions, geographical distance, and insufficient guidance.

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Financial Inclusion

Singh (2011) conducted a study on inclusive growth and regional disparity in banking services. The study utilized secondary data and found uneven distribution of bank offices across six banking regions in India, including the north-eastern region. The study concluded that the north-eastern region faced challenges such as poor infrastructure, geographical inconvenience, low population density, and lower business for commercial banks, leading to disparities in access to banking services. The study also highlighted the region's low credit-deposit ratio, low loan recovery, and higher non-performing assets (NPA).

Atkinson and Messy (2012) as well as OECD (2013) emphasized that women had lower financial knowledge compared to men and were less likely to actively engage in financial activities. They suggested that improving financial knowledge could promote women's financial inclusion.

A study conducted in the NER by Bhanot, Bapat, and Bera (2012) highlighted that proximity to a bank branch or post office increased the likelihood of financial inclusion, but it did not necessarily facilitate inclusion. The complex and time-consuming procedures involved in the system discouraged stakeholders from accessing formal financial services.

Mohapatra (2014) commented on the role of Regional Rural Banks (RRBs) in promoting financial inclusion. Additionally, age was identified as an important demographic factor that should be considered in relation to financial inclusion.

Tuesta et al. (2015) conducted a study in Argentina to examine the three dimensions (access, usage, and barriers) that determine financial inclusion. They analysed variables such as the use of financial products (e.g., accounts, debit cards, credit cards, e-payments, formal credit), perceived barriers (e.g., distance, costs, required documents, distrust of financial institutions, influence of other family members, lack of money), and demographic factors (e.g., gender, age, income, education level). The study concluded that age was a significant factor affecting financial inclusion from the demand side.

Vanlalmuana and Gupta (2015) conducted a study on financial inclusion among private school teachers in Aizawl district and highlighted that despite being well-educated and having financial resources, 15% of the teachers did not have basic savings accounts.

Zinsa and Weill (2016) conducted a study in Africa to examine the factors that determine financial inclusion. They analysed data from the World Bank's Global Findex database, which covered 37 African countries, and used the probit model. The study found that males, wealthy individuals, those with higher education levels, and older people were more likely to be financially included. The study also found no significant difference between the factors influencing traditional banking and mobile banking. However, the determinants of informal finance differed from those of formal finance.

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Tuesta et al. (2015) and Zulfiqar et al. (2016) emphasized that the perception of lengthy and multiple document requirements acted as a major barrier to financial inclusion for various demographic groups. With the increasing prevalence of technology, information that was previously inaccessible to the general public is now readily available on mobile phones or computers, providing convenience. Access to information is no longer seen as a significant barrier to financial inclusion. However, although smartphones are becoming more affordable, they have not yet reached the rural population. Moreover, internet connectivity (Wi-Fi/GPRS, etc.) remains a barrier, particularly in rural and remote areas. Numerous studies have been conducted to gather stakeholders' perceptions on this issue.

A study conducted by Bhuvana and Vasantha (2016) concluded that financial literacy, high costs, technology, trust, income level, distance, and inappropriate products were determining factors for the level of financial inclusion in rural areas.

Abel, Mutandwa, and Roux (2018) conducted a study in Zimbabwe using a nationally representative sample of 4,000 Zimbabweans aged 18 years and older. Their objective was to assess the determinants of financial inclusion. The study employed the Logit Model and found a positive relationship between age and financial inclusion. A similar study conducted in India by Singh (2019) yielded comparable results.

Lalremruati and Fanai (2018) conducted a study on financial inclusion among food and grocery shop owners in Aizawl and found that over 97% of the respondents were financially included. However, they faced challenges such as a preference for cash transactions, low income and assets, lack of financial knowledge, bank officials' attitudes, limited number of banks in the area, and cumbersome banking procedures.

In India, Ghosh (2019) conducted a study using district-level secondary data to examine the impact of Financial Literacy Centres (FLC) on financial inclusion and knowledge. The study utilized household-level data from the Financial Inclusion Insights (FII) survey conducted by Inter-Media, a global research group.

Lalhmingsangi (2019) found that less than 20% of self-employed individuals in Aizawl prepared monthly budgets. Surprisingly, only 1% regularly saved surplus money, while 45% kept money in cash and 39% deposited it in savings bank accounts. Additionally, 35% of the respondents did not openly discuss financial matters. The study concluded that the level of financial literacy in Mizoram was very low.

Lalrinmawii (2019) concluded in a study on financial inclusion in Aizawl that the availability of banks in proximity to individuals was the most influential factor in promoting financial inclusion. The study also highlighted that since all credits and even MGNREGS funds were disbursed through banks, most women in the region had bank accounts.

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Another research conducted by Bora (2020) revealed that Tripura, among the eight States of NER, had the highest level of financial inclusion, followed by Assam, Sikkim, Mizoram, and Meghalaya. However, Arunachal Pradesh, Manipur, and Nagaland had low scores on the financial inclusion index. The objective of financial inclusion is to ensure that formal financial services are easily accessible to all citizens, thereby protecting them from falling victim to financial fraud.

Sailo and Singh (2019) found that financial literacy was relatively low among college teachers in Aizawl. The respondents were familiar with low-risk investment avenues, but their knowledge decreased with higher risk involvement.

Boro (2015) found in a study that younger customers preferred technological mediums for banking transactions. They were highly aware of ATMs and used them more compared to other technological methods. Another study indicated that Assam had lower financial inclusion compared to the national average, with significant differences in geographic and demographic penetration and usage ratios between Assam and the rest of India. The study suggested that banks should focus on providing technology-driven products and services to excluded areas and populations.

Chakraborty and Barman (2013) conducted a study on financial inclusion in Tripura and highlighted the difficulty of recovering loans disbursed to poor individuals by financial institutions. Another study conducted in the north-eastern region observed that while the Indian financial system had expanded, financial exclusion among the underprivileged remained a major concern.

The researcher emphasized the importance of providing basic banking services to all sectors of society at affordable rates in order to achieve financial inclusion (Goyal, 2008). In a study conducted by Kodan, Garg, and Kaidan (2011), the level of financial inclusion in the NER was evaluated, and they highlighted the implications for future action that could be taken by the Reserve Bank. Previous studies have been conducted in India to assess financial literacy and inclusion, but there have been fewer studies focusing specifically on the State of Mizoram.

Financial inclusion and exclusion are terms that describe access to financial services. Financial exclusion refers to the inability to access appropriate financial services (Carbo et al., 2007), while financial inclusion is defined as having access to financial services at affordable terms for all segments of society (Arner et al., 2020; Corrado & Corrado, 2017; Fernández-Olit et al., 2019). Financial inclusion encompasses dimensions such as account ownership, savings, borrowing, and insurance at formal institutions (Demirgüç-Kunt et al., 2018; Diriker, Landoni, & Benaglio, 2018; Grohmann et al., 2018). Studies have shown that individuals who are poor, unemployed, less educated, women, elderly, living in rural areas, or belonging to ethnic or religious minorities are less likely to be financially included (Carbo et al., 2007;

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Corrado & Corrado, 2015; Demirgüç-Kunt et al., 2018). This can be attributed to factors such as financial illiteracy, the costs associated with financial services, and the requirements imposed by financial institutions. Financial illiteracy refers to difficulties in understanding and using financial services, which discourages people from utilizing those (Corrado & Corrado, 2015). The costs of financial services act as a barrier for underserved communities who may lack the resources to afford them (Corrado & Corrado, 2015; Demirgüç-Kunt et al., 2018).

According to a study conducted in 2019 by Mushtaq and Bruneau, the study examined the impact of ICT diffusion on financial inclusion and poverty reduction. The findings of present study highlights the significance of financial inclusion and ICT development; particularly mobile phone penetration can promote financial inclusion in lower and middle income countries.Other factors contributing to financial exclusion include the absence of suitable financial infrastructure, lack of trust in financial institutions, preference for cash transactions, and voluntary exclusion (Corrado & Corrado, 2015; Demir et al., 2020).

Financial exclusion has negative implications for individuals, leading to difficulties in saving, borrowing, investing, and obtaining insurance, which can result in poor financial management, financial distress, and societal exclusion (Carbo et al., 2007; Corrado & Corrado, 2017).

On the other hand, financial inclusion has positive effects on well-being. It provides a safety net during economic shocks, enables savings for long-term planning, facilitates investment in education and entrepreneurship, and offers insurance to manage risks (Arner et al., 2020; Ozili, 2018). These outcomes contribute to higher economic growth, reduced poverty, decreased socio-economic inequality, and improved financial well-being at both individual and macro levels (Arner et al., 2020; Corrado & Corrado, 2017; Demir et al., 2020; Ozili, 2018).

Therefore, financial inclusion plays a significant role in achieving the Sustainable Development Goals (SDGs) (Arner et al., 2020; Demirgüç-Kunt et al., 2018). Financial literacy refers to the knowledge, skills, and ability to make informed decisions about financial planning, wealth accumulation, and debt and pension matters, ultimately leading to financial well-being. It encompasses understanding financial services and the confidence to use that knowledge in making financial choices.

An individual's financial literacy is often measured by their understanding of risk diversification, inflation, compound interest, and numeracy related to interest rates. These four dimensions are crucial for effectively utilizing financial services. Understanding risk diversification involves recognizing the differences in risk between various investment options. Inflation knowledge pertains to understanding the impact of price and income increases on purchasing power. Knowledge of compound interest is necessary to comprehend the cumulative effect of interest on savings. Numeracy related to interest rates involves the ability to calculate interest payments on loans.

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There are various factors that influence financial literacy. Demographic, socio-economic, personal, and cultural characteristics play a role in determining an individual's level of financial literacy. Factors such as age, gender, ethnicity, income, employment status, and geographical location can all impact financial literacy. Conversely, an individual's level of financial literacy influences their day-to-day financial management skills. Insufficient financial literacy combined with the use of financial services can lead to costly borrowing, limited wealth accumulation, excessive credit card use, and financial distress resulting from poor decision-making. Conversely, a higher level of financial literacy positively influences financial planning, borrowing decisions, investment choices, and overall financial well-being.

Financial illiteracy can act as a barrier to financial inclusion as it discourages and limits people from utilizing financial services. However, research has shown that financial literacy has a positive impact on financial inclusion. It serves as a substitute for financial infrastructure at lower levels of financial depth and as a complementary factor at higher levels. Additionally, the use of digital financial services and internet usage mediate the relationship between financial literacy and financial inclusion. Internet usage facilitates the adoption of digital financial services, which, in turn, promotes financial inclusion.

In conclusion, higher financial literacy leads to increased financial inclusion. This positive relationship can be attributed to improved knowledge and awareness of financial behaviour, which are crucial for making appropriate financial decisions and effectively utilizing financial services. Therefore, it is vital to enhance financial literacy in order to promote greater financial inclusion and improve financial management.

Fintech

What is Fintech?

Fintech, refers to companies that primarily rely on technology platforms to revolutionize financial services and make them more efficient. Essentially, Fintech represents a modern form of financial services in the 21st century, where start-up companies strive to transform traditional transactions into innovative and effective methods using advanced technological devices. These technological advancements are applied in various financial sectors, including mobile payments, money transfers, loans, fundraising, and asset management. Examples of technology utilized in financial transactions include peer-to-peer payment systems, peer-to-peer lending, mobile banking, digital wallets, and Block chain. The objective of these technological applications is to enhance the benefits and efficiency of financial transactions while also reducing costs for customers. Fintech represents the convergence of finance and technology to create innovative solutions in the financial industry.

Evolution of Fintech

The history of Fintech has witnessed significant advancements in the financial sector, with the adoption of new technologies and digitalization. Nowadays, many individuals utilize

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technology-based financial products like smartphone payments, online banking, and online trading platforms to manage their finances. However, the majority of people are unaware of the origins of these ideas and have limited knowledge about Fintech, unless they are investors or experts in the financial field. Fintech has transformed lives and brought about a major shift in how people interact with financial transactions, including loans and credit lines. It is important to note that Fintech is not a recent technological product but has existed for a considerable period. It continues to be used and improved alongside technological advancements, aiming to innovate and revolutionize the traditional financial industry (The Economist, 2015). According to McKinsey report estimates that advances in Fintech can potentially expand digital banking to 1.6 billion people in emerging economies and increase the volume of loans extended to individuals and businesses by 2.1 trillion by 2025 (Manyika et al. 2016).

The study by Guild & James (2017) found that technological innovation has the potential to revolutionise global finance by making it more inclusive, decentralised and democratic. Fintech's greatest asset is that it is agile and can deployed to leverage existing infrastructure and government policies to make finance more inclusive. This is important for the future of finance, as inclusive finance is strongly linked with sustainable economic growth. But successful adoption of financially inclusive policies also requires striking an appropriate regulatory balance: one that encourages innovation and growth in new industries and technologies, while also clarifying regulatory requirements and developing policies that ensure stability and a minimal standard of systemic security as those sectors grow.

In a study conducted by Boshkov (2019), the impact of digital finance on financial inclusion was found to yield diverse outcomes. Firstly, there were negative effects associated with the complexity of the digital financial system, particularly when applied to individuals with low-income backgrounds. These individuals often declined to adopt digital finance due to their perceived unpreparedness in keeping up with technological advancements and innovations. Factors such as high costs and low financial literacy further hindered their ability to access conventional financial services, thus limiting their financial mobility.

On the other hand, the study also revealed a positive effect of digital finance on financial inclusion. The user-friendly nature of digital financial platforms encouraged individuals to not only utilize them but also share information and influence others. This, in turn, led to a greater number of people embracing digital finance, ultimately expanding the scope of digital financial inclusion.

Fintech has played a role in reducing the dependence on traditional financial institutions, although it has not eliminated the need for intermediaries. Instead, it replaces one intermediary, such as a financial institution, with another, such as a financial technology firm (Chen & Bellavitis, 2020).

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According to a study conducted in 2021 by Vijai C, Joyce D & Elayaraja, M (2020), concluded that Fintech is important for the future of the financial sector, as inclusive finance is strongly national economic growth. Fintech has taken the next level of financial services like shopping, transfer; receive funds, save time everything happens in real-time, and user friendly. Fintech benefits of both consumers and business. The government introduced the UPI and BHIM has attracted millions of users in India to transaction online.

In a study conducted by Peddalwar, S.S, & Lakshmi P (2022), it was ascertained that the age and gender of an individual does not play a vital part in the usage of these services but on the contrary these demographics appear to be influential to the adaptation of Fintech services. This research paper also elucidates the interpretation of the factor analysis of various components that denotes their significance towards the adaptation of the Fintech services. The ease of usage and user friendly is the most influential towards the adaptation of Fintech services, respectively being 39.67% and 27.82% (weightage) according to the factor analysis table.

According to a study conducted by Widyaningsih D, Siswanto E, and Zusrony E (2021), it was found that both financial literacy and the accessibility of digital financial innovations have a notable impact on financial inclusion. Furthermore, financial literacy significantly influences the adoption of digital financial innovations. The research also indicates that the community and micro, small, and medium-sized enterprise (MSME) actors have a high level of financial literacy, as well as behavioral and attitudinal familiarity with digital and financial technologies. This familiarity makes it easier to promote the usage of digital financial innovation products and thereby expand financial inclusion. However, it was observed that information about digital financial innovations does not directly mediate the relationship between financial literacy and financial inclusion.

In their research conducted in 2021, Gupta and Agrawal found that the study exhibited that there are diverse factors responsible for altering the landscape of the Indian Financial System. These factors stimulate the customers to adopt Fintech venture services over traditional financial institutions. Further, the results exhibited that the adoption rate of Fintech is less before the global health outbreak but is very high and penetrative after the crisis. Also, the results follow a positive association between the Fintech adoption by the end consumers and the global health Pandemic COVID-19 outbreak. Thus, it implies that the adoption rate of Fintech has increased tremendously, which indicates a more financial inclusion and evolution.

Hypothesis 1

- H0: Students who possess a limited understanding of financial adoption concepts are unlikely to possess knowledge regarding the adoption of Fintech services.
- H1: Students who possess a strong understanding of financial adoption concepts are more likely to possess knowledge regarding the adoption of Fintech services.

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Hypothesis 2

- H0: Gender does not have significant influence with the level of financial adoption of Fintech services.
- H1: Gender has a significant influence with the level of financial adoption of Fintech services.

Hypothesis 3

- H0: There is a negative relationship between financial adoption and Fintech services.
- H1: There is a positive relationship between financial adoption and Fintech services.

Research Methodology

Research methodology can be explain as a giving idea or plan in which researcher is using various methods & process to accomplish research objectives or target. Researcher methodology is a systematic & formal way to solve a particular research problem. It is a science of learning how research is to be carried out. Researcher describing, explaining, estimating all circumstances related to work are called research methodology. It is also explain as the study of methods by which information & knowledge is earned with a specific topic or areas. The main motive of research methodology is to give the work plan of research.

According to Sidhu (1998), "Research is a systematic method of exploring, analysing & conceptualizing social life in order to extend, correct or verify knowledge aids in the construction of a theory or in the practice of an art".

Research Design:-

Research design is descriptive in nature. Research design is the overall plan or programme of research. It is common layout for the collection, measurement & analysis of data. In descriptive study information is collected without changing the environment. Descriptive research design used to recognize & gain information on the characteristics of particular problems. Collection of data will be take quantitative & statistical techniques to summarize the information. Descriptive statistics use to obtain the mean and standard deviations.

Data collection:-

Primary Data-

Primary data will be collect from students across top business schools of Personal Interview, Telephonic Interview & Questionnaire methods will be used for gathering information.

Secondary Data

Journals

Magazines

Websites

Research publications

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Population and Sample

The population for this study shall be graduates of the leading management schools from the metro cities and Tier II cities of India. The Sample size is around 500 business graduates

Sampling: Random Sampling is purported to be used in the study

Statistical Tool and Analysis

Descriptive statistics shall be used to identify the most important factors that causes academic stress among students and the techniques of stress busters adapted by the students.

Chart and diagrams: In this research I will use chart and diagram for effective representation of data for better understanding facts of research.

Frequency distribution: Collected data will be distributed in frequencies

Central tendency measurement: according to collection of data central value of data will be analyze by mean in this study.

Standard Deviation: To calculate the amount of variation or dispersion of data, we use standard deviation method.

Correlation analysis: In this research for comparing two variable of research I will use correlation analysis as statistical tool.

Construction of Measurements

Financial Literacy Measurement

A literature review was conducted first in order to design the scale's items. The questions are modified to suit the targeted respondents in urban cities of India based on a study by Potrich et al., (Caroline Grigion Potrich et al., n.d.).

The multiple-choice questions modified from Van Rooij et al. (2011), Klapper et al. (2013), National Financial Capability Study (NFCS, 2013), OECD (2018), Yakoboski, Lusardi, and Hasler were used to determine the level of financial knowledge (2018).

The concept consists of twelve items designed to assess the respondent's understanding of inflation, interest rates, and the time worth of money, risk, return, diversification, stock markets, credit, discounts, expense control, and fundamental mathematical operations. Three items adapted from OECD (2018) measure financial attitude, and seven items adapted from Shockey (2002), O'Neill and Xiao (2012), and OECD (2018) measure financial behaviour (2018).

Digital Financial Literacy Measurement

To measure digital financial literacy (DFL) of respondents, questionnaires are constructed based on a study by Liew et al., (Liew et al., 2020). This questionnaire was used to assess their DFL on four aspects, as Morgan et al. proposed (2019). The questionnaire is divided into two parts. The first segment gathered demographic information about the respondents. The second segment included sixteen questions designed to ascertain the respondent's DFL. The

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respondents were asked to rate 16 questions on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), which assess respondents' knowledge of digital financial products, awareness of digital financial risk, knowledge of financial risk control, and knowledge of consumer rights when adopting digital financial products and services.

Intention to Adopt Fintech and DFL applications Measurement

Finally, instrument to measure the intention to adopt Fintech and DFL applications was designed based on a study by Setiawan et al., (Setiawan et al., 2021) which used a Likert

Scale of 1 to 5, from strongly disagree (1) to strongly agree (5).

Data Analysis Technique

The researcher utilises the following statistical tools to provide quantitative description of the data:

Frequency and Percentage. This was used as a descriptive analysis to demonstrate the profile of the respondents with respect to age, gender, ethnicity, household income, level of education and occupation. It was also utilised to describe the relationship of a part to a whole.

Mean and Standard Deviation. This was employed to illustrate the average response of the respondents on the financial literacy, digital financial literacy and intention to adopt Fintech and DFI constructs.

One-Way Analysis of Variance (ANOVA). This was used to determine the significance of difference in the Financial Literacy, Digital Financial Literacy and intention to adopt Fintech and DFI as well as the demographic profiles of the respondents.

Chi-Square Test of Independence. This is a nonparametric test used to determine whether there is an association between categorical variables (i.e., whether the variables are independent or related).

Pearson r. This is used to demonstrate the degree of correlation between financial literacy, digital financial literacy and intention to adopt Fintech and DFI

Bibliography

Almenberg, J. & Soderbergh. (2011). Financial literacy and retirement planning in Sweden. 10. 585-598. 10.1017/S1474747211000497.

Atkinson, A. F., & Messy, F. (2012). Measuring financial literacy: Results of the OECD / International Network on Financial Education (INFE) pilot study. OECD Working Papers on Finance, Insurance and Private Pensions, 15, 1–73.

Agarwalla, S. K., Barua, S., Jacob, J., & Varma, J. R. (2012). A Survey of Financial Literacy among Students, Young Employees and the Retired in India. Citi Foundation.

Aggarwal, M., & Gupta, M. (2014). Awareness of Financial Literacy among College Students. Apeejay, Journal of Management and Technology, 1-13.

Estd. in 2008
''बेटी बचाओ-बेटी पढ़ाओ''

Anil Chandra, P (2015), A Study of Financial Literacy & its Role on Financial Inclusion in Jharkhand, International Journal of Creative Thoughts (IJCRT), Vol (3), Issue 2, ISSN:2320-2882.

Allgood, S., & Walstad, W. (2016). The effects of perceived and actual financial literacy on financial behaviors. Economic inquiry, 54(1), 675-697.

Arner, Douglas & Buckley, Ross & Zetzsche, Dirk & Veidt, Robin. (2020). Sustainability, FinTech and Financial Inclusion. European Business Organization Law Review. 21. 7-35. 10.1007/s40804-020-00183-y.

Beal, D., & Delpachitra, S. (2003). Financial Literacy among Australian University Students. Economic Papers, 22(1), 65-78.

Bhanot, Disha & Bapat, Varadraj & Sasadhar, Bera. (2012). Studying Financial Inclusion in North-East India. International Journal of Bank Marketing. 30. 465-484. 10.1108/02652321211262221.

Bashir, T., Ahmed, H. R., Jahangir, S., Zaigam, S., Saeed, H., & Shafi, S. (2013). Investment preferences and risk level: Behaviour of salaried individuals. IOSR Journal of Business and Management, 10(1), 68-78.

Beata Swiecka & Eser Yeşildağ & Ercan Özen & Simon Grima, 2020. "Financial Literacy: The Case of Poland," Sustainability, MDPI, vol. 12(2), pages 1-17, January.

Bhushan, P., & Medury, Y. (2013). Financial literacy and its determinants. International Journal of Engineering, Business and Enterprise Applications, 4(2), 155-160.

Boshkov, T. (2019). Virtual Banking and Financial Inclusion. 10(13), 2010–2012. https://doi.org/10.7176/RJF.

Cutler, N. E. and Devlin, S. J . (2000). Financial Literacy 2000, Journal of the American Society of CLU & ChFC. 50, 4.

Dorfleitner, Gregor & Hornuf, Lars & Schmitt, Matthias & Weber, Martina. (2017). The FinTech Market in Germany. 10.1007/978-3-319-54666-7_4.

Dharmesh K. Mishra, Sushant Malik, Asmita Chitnis, Dipen Paul, Subham Sushobhan Dash , "Factors Contributing to Financial Literacy and Financial Inclusion among Women in Indian SHGs" Universal Journal of Accounting and Finance, Vol. 9, No. 4, pp. 810 - 819, 2021. DOI: 10.13189/ujaf.2021.090427.

Guild, James. 2017. "Fintech and the Future of Finance" Asian Journal of Public Affairs 10(1): p.52-65.

Guiso, Luigi & Jappelli, Tullio. (2008). Financial literacy and portfolio diversification. European University Institute, Economics Working Papers.

Hilgert, M.A., Hogarth, J.M. and Beverly, S.G. (2003) Household Financial Management: The Connection between Knowledge and Behaviour. Federal Reserve Bulletin, 89, 309-322.

In Lee, Yong Jae Shin, Fintech: Ecosystem, business models, investment decisions, and challenges, Business Horizons, Volume 61, Issue 1, 2018, Pages 35-46, ISSN 0007-6813, https://doi.org/10.1016/j.bushor.2017.09.003.

Joo, S.H. and Garman, E.T. (1998). The Potential Effects of Workplace Financial Education Based on the Relationship between Personal Financial Wellness and Worker Job Productivity. Personal Finances and Worker Productivity.

Kumari Sweta and Viz Priya (2013), Financial Literacy- An overview of growing efforts. IOSR Journal of Economic and Finance (IOSR-JEF), 79-85.

Lusardi, A. & Mitchell Olivia.S. (2014), Journal of Economic Literature 2014, 52(1), 5–44 http://dx.doi.org/10.1257/jel.52.1.5.

Leora Klapper, Mayada El-Zoghbi and Jake Hess, Achieving the sustainable development goals: the role of financial inclusion, Consultative Group to Assist the Poor, April 2016.

Marcolin, S., & Abraham, A. (2006). Financial literacy research: current literature and future opportunities.

Mushtaq, R., & Bruneau, C. (2019), Microfinance, financial inclusion and ICT: Implications for poverty and inequality, Technology in Society, Volume 59, 2019, 101154, ISSN 0160-791X, https://doi.org/10.1016/j.techsoc.2019.101154.

Mahdzan, Nurul & Tabiani, Saleh. (2013). The Impact of Financial Literacy on Individual Saving: An Exploratory Study in the Malaysian Context. Transformations in Business and Economics. 12. 41-55.

Peterson K. Ozili, Impact of digital finance on financial inclusion and stability, Borsa Istanbul Review, Volume 18, Issue 4, 2018, Pages 329-340, ISSN 2214-8450, https://doi.org/10.1016/j.bir.2017.12.003.

Rabbani, Mustafa & Khan, Shahnawaz. (2020). FinTech, Blockchain and Islamic Finance: An Extensive Literature Review. EUROPEAN RESEARCH STUDIES JOURNAL. XXIII. 348-367.

Ratecka, P. (2020). FinTech—definition, taxonomy and historical approach.

Ronald, & Volpe, P & Volpe, Ronald & Kotel, Joseph & Chen, Haiyang. (2002). A Survey of Investment Literacy among Online Investors. Financial Counselling and Planning. 13.

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. Journal of Financial Economics, 101(2), 449-472.

Widyaningsih D, Siswanto E, & Zusrony E (2021), The Role of Financial Literature through Digital Financial Innovation on Financial Inclusion (Case Study of MSMES in Salatiga City, International Journal of Economics, Business and Accounting Research (IJEBAR), Vol(5), Issue 4. E-ISSN: 2614-1280, P-ISSN 2622-4771.

https://bfsi.economictimes.indiatimes.com/budget/union-budget-2023/india-has-highest-fintech-adoption-rate-gains-3rd-place-in-payments-highlights-economic-survey/97495949. Retrieved on 07/08/2023.